

AMES LABORATORY

ENVIRONMENTAL MANAGEMENT SYSTEM

Questions and Answers

Background: An Environmental Management System (EMS) is a continual cycle of planning, implementing, reviewing and improving the process and actions that the Laboratory undertakes to meet its organizational and environmental goals. Basically, an EMS incorporates and promotes environmental awareness, pollution prevention, conservation of natural resources and continual improvement into all Laboratory activities. The EMS documents the Laboratory's environmental plans and procedures and recommends environmental objectives and targets to upper management. Principles for an EMS were incorporated into the Laboratory's Integrated Safety Management System on December 31, 2004.

Why does the Laboratory need an EMS?

The EMS was required by Executive Order 13148, *Greening the Government Through Leadership in Environmental Management*. An EMS helps the Laboratory to continually improve (i.e. reduce its footprint on the environment).

What are the principles of EMS?

The Laboratory chose the ISO14001:1996 Standard for modeling its EMS because it is the most widely used and accepted standard.

What are the Laboratory's EMS Goals?

Over all goals of the Laboratory are to conserve energy, natural resources and reduce pollution.

What can I do? I work in an office and do not generate waste?

There are several things each of us can do. 1) Turn off your lights when you are away from your office for more than five minutes. 2) Use the power saving features on your computer. 3) Recycle white paper. 3) Carpool to work. 4) Double side your copies. 5) Purchase energy star equipment. 6) Purchase products that contain recycled materials. 7) Recycle your batteries.

How much can turning off one light really save?

One light isn't a big deal, but eliminating all unnecessary lighting can have significant savings for the Laboratory.

What is an "Aspect" and "Impact"?

These are terms used in an environmental management system. In simple terms an aspect is the cause of something and an impact is the effect (e.g. Aspect = electricity use; Impact = air pollution, resource consumption (water, coal, oil, etc.)).

Aspects = Cause Impact = Effect

What are the identified aspects for the Laboratory?

The following are aspects the Laboratory's Environmental Management System Steering Group has identified as having impacts on the environment. When reviewing these aspects please take the necessary actions in your laboratories and spaces to help reduce the Laboratory's environmental impacts. (continued on the other side)

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1) Electricity Usage. Reduce usage by:

- Enabling hibernation and shut down features for monitors and CPUs.
- > Turning off lights when out of the office/laboratories.
- Lowering sashes on fume hoods when not in use.
- > Purchasing energy star equipment.

2) Paper Usage. Reduce usage by:

- > Using electronic copies to edit documents.
- ➤ Using e-mail to distribute documents.
- > Printing double sided copies.
- ➤ Using recycled content paper or paper made from alternative materials (i.e. kenaf).
- Recycling all white papers.

3) Solid Waste. Reduce solid waste by:

Recycling metal, batteries, white paper, Styrofoam packaging, and phone books.

4) Compressed Gas. Reduce compressed gas usage by:

- > Using the smallest amount for your activity.
- > Purchasing only amount needed.

5) Effluent Discharges. Eliminate hazardous material discharges to the sanitary sewer by:

- ➤ Collecting hazardous materials/waste for pick-up and proper disposal by ESH&A (4-2153).
- Using soaps that do not contain phosphates.
- > Storing chemicals away from sink and floor drains.

6) Hazardous Waste Generation. Reduce hazardous waste generation by:

- ➤ Using the smallest amount of chemical possible for your activity.
- > Purchasing the smallest amount of chemical needed.
- Acquiring small amounts of chemicals from other research groups rather than purchasing larger amounts of the same chemical(s).
- > Using less toxic substitutes.

7) Water Usage. Reduce water usage by:

- ➤ Using closed loop systems.
- > Requesting repairs for leaky faucets.

8) Affirmative Procurement. Conserve natural resources by:

- > Purchasing items that contain recycled materials.
- > Purchasing energy star equipment.

A power point training presentation for Environmental Management System Awareness Training is also available at http://www.external.ameslab.gov/esha/Training/sstraining.html.

to hear from you! Please contact Dan Kayser at 4-7923 or at Kayser@ameslab.gov or write down your suggestions here and mail to G40 TASF.	

If you have any suggestions on how to conserve our resources, reduce energy usage and prevent pollution, we would like

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